

RAPPAHANNOCK & NORTHERN NECK COASTAL BASINS TRIBUTARY STRATEGY REVISION

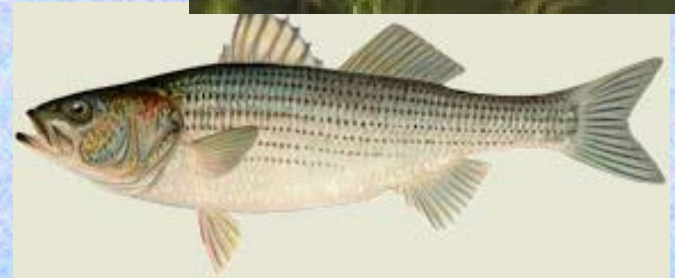
Matthew Criblez

DCR York/Rappahannock Regional Manager



Purpose of Tributary Strategies

- Restore and protect aquatic habitat for living resources
- Reduce, and “cap” nutrient and sediment loads
- Identify control actions that are practical, cost-effective, and equitable
- Develop stakeholder involvement and commitments



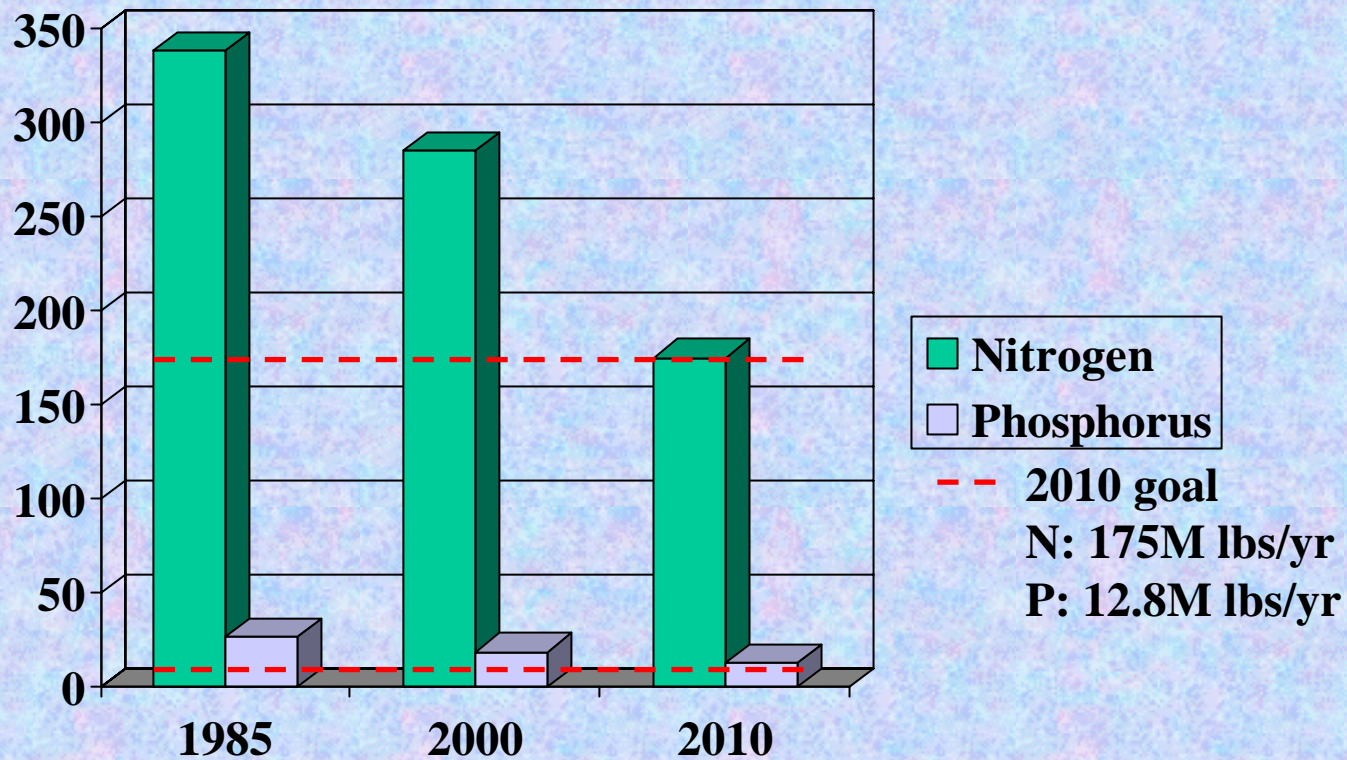
Basis for Tributary Strategy Program

- Chesapeake Bay 2000 Agreement
- Actions can't start at water's edge
- Each basin is different
- Basins affect the bay differently

Key Considerations for Revising Tributary Strategies

- Existing strategies serve as the starting point
 - Use existing Tributary Strategy data
 - Account for existing accomplishments
- A voluntary, cooperative approach
- Seeking common agreement on what needs to be done
- Principles of cost-effectiveness, feasibility, and equity are key

Baywide N&P Change with 2010 Goal*



* *In millions of pounds per year.*

The Rappahannock River Watershed (a Basin “Snapshot”)

- Length: 184 miles
- Drainage: 1.74 million acres
- Counties: 15
- Population: 255,558
- Tributaries: Rapidan, Robinson, Hazel, Thornton, Corrotoman Rivers



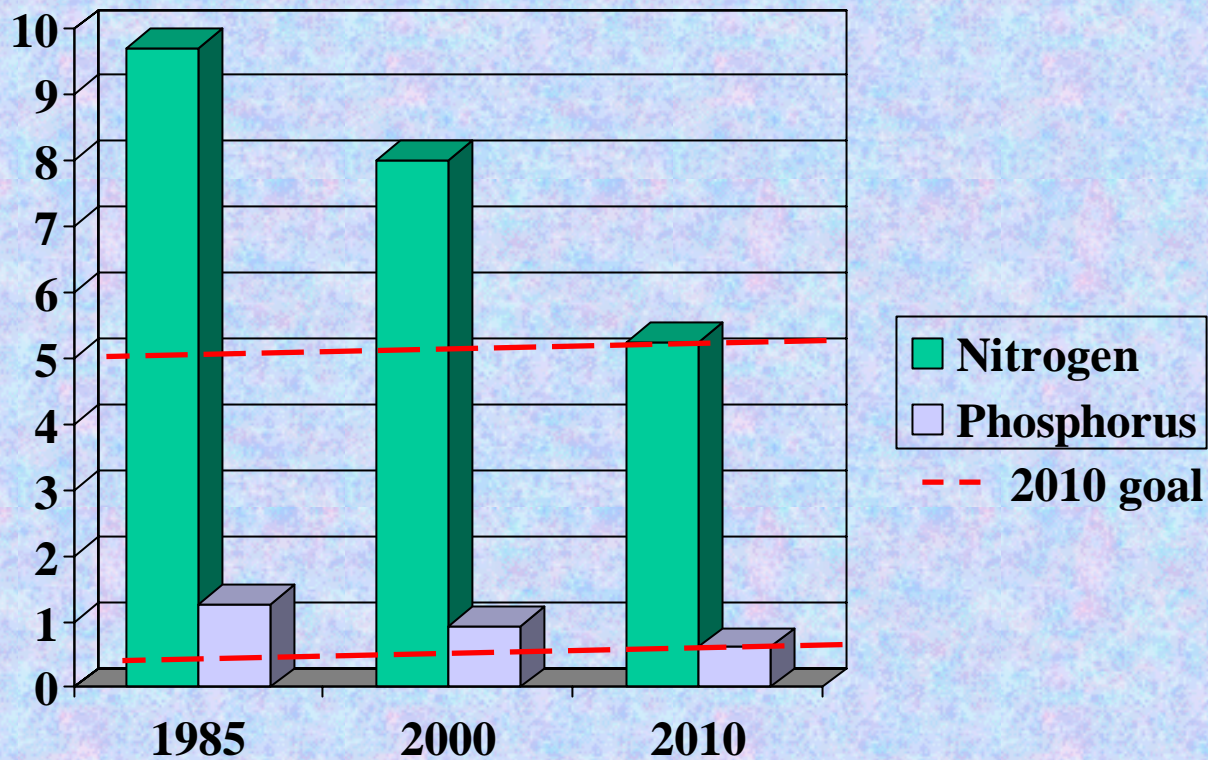
Original Tributary Strategy

Goals

- *Reduce volume of anoxic water (D.O. < 1 mg/l) by 50%*
- *Increase the density of underwater grasses by 50%*
- *Reduce nitrogen load by 33%, phosphorus load by 29%, and sediment load by 20%*

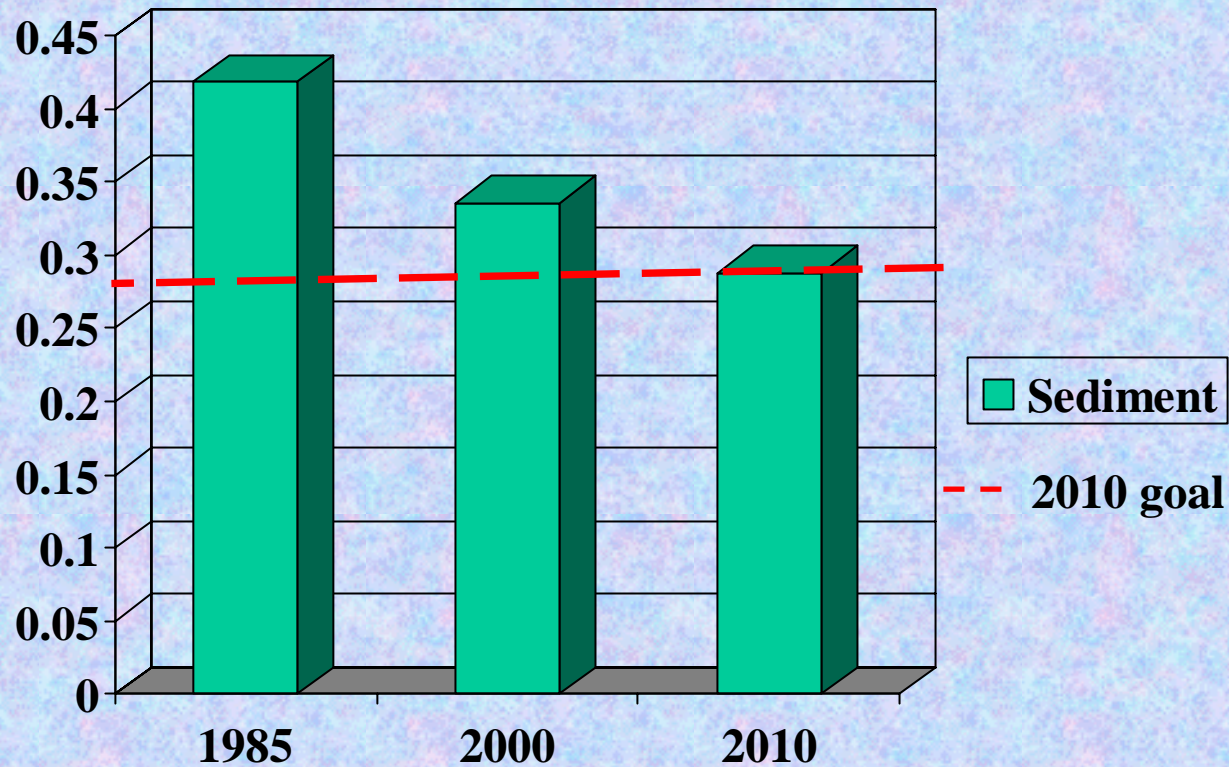


Rappahannock River Basin N&P Change with 2010 Goal*



* In millions of pounds per year.

Rappahannock River Basin Sediment Change with 2010 Goal*

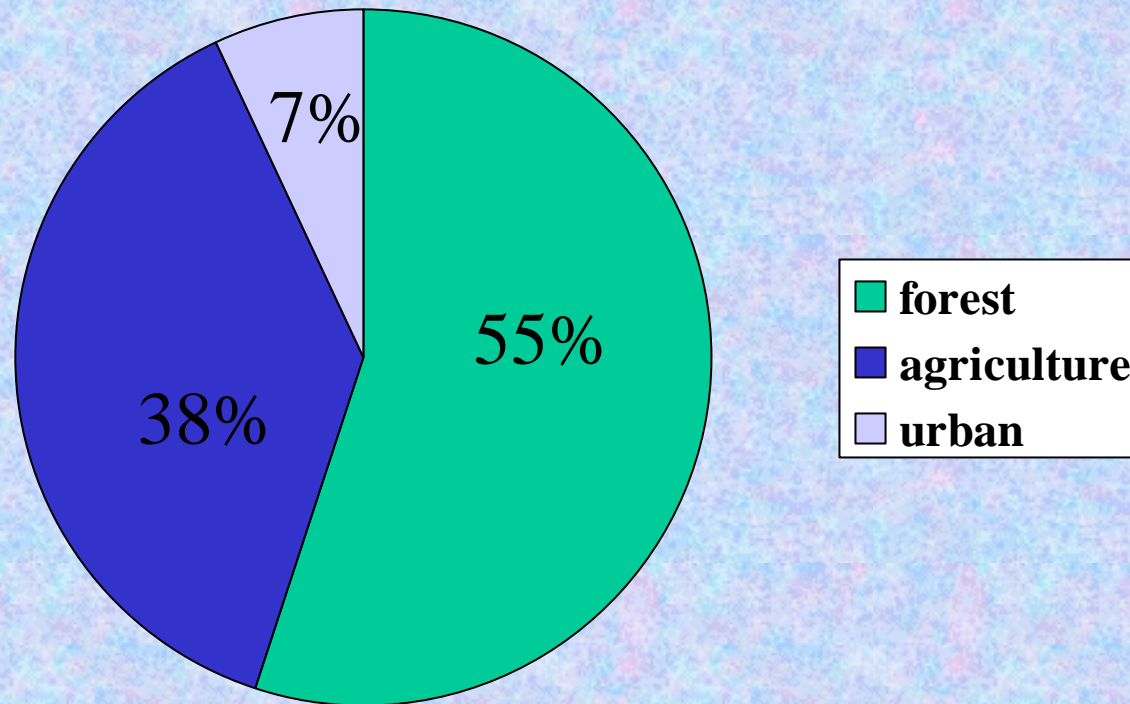


* *In tons per year.*

Progress

- Nitrogen (million pounds/year)
 - 1985 Load: 9.70
 - 2000 Load: 8.00 (-18%)
 - 2010 Cap: 5.24 (-35%)
- Phosphorous (million pounds/year)
 - 1985 Load: 1.27
 - 2000 Load: 0.94 (-26%)
 - 2010 Cap: 0.62 (-34%)
- Sediment (million tons/year)
 - 1985 Load: 0.418
 - 2000 Load: 0.336 (-20%)
 - 2010 Cap: 0.288 (-14%)

Land Uses in the Rappahannock River Watershed



Potomac River

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Stakeholder Group:
Potomac Watershed Roundtable

Rappahannock River

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Stakeholder Group:
Rappahannock River Basin Commission

Shenandoah River

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Stakeholder Group:
Pure Water 2000

York River

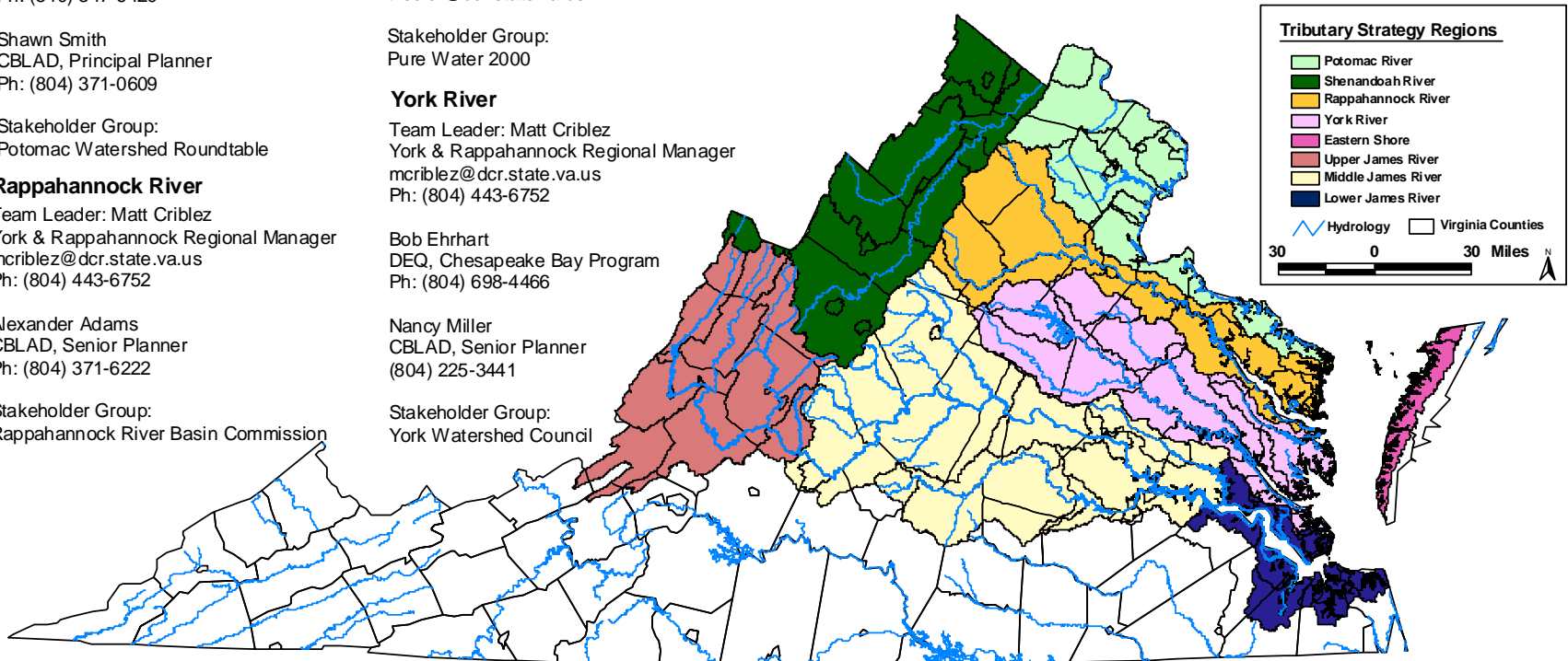
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Stakeholder Group:
York Watershed Council

Tributary Strategy Teams With Stakeholder Groups



Upper James River

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Stakeholder Group:
Upper James River Conservation Roundtable

Middle James River

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Stakeholder Group:
Piedmont James River Roundtable

Lower James River

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Stakeholder Group:
Hampton Roads Lower James River Roundtable

Eastern Shore

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Stakeholder Group:
Eastern Shore Watersheds Network

Stakeholder Involvement

“Basin Teams” to Include:

- Local governments
- Planning district commissions
- Soil and water conservation districts
- Wastewater treatment facilities
- Conservation organizations
- Business interest groups
- Industry
- Citizens



Stakeholder Involvement (cont)

- State agencies
- Federal agencies (land management)
- Real Estate Associations
- Homebuilder Associations
- Watermen
- Marinas



Rappahannock Basin Team

- Use existing structures such as:
 - Rappahannock River Basin Commission
 - Rappahannock Conservation Council
- Technical Assistance and Review
 - Rappahannock Technical Advisory Group (Technical Review)
 - Rappahannock Workgroups (RRCC, DIG, Pub Ed/Outreach)

Process: Local Planning

- Basin-specific process, local flexibility in meeting the goals
- “Basin team” will help define process
- Need to identify and build on recent success
 - E.g. Growing use of LID in Rappahannock basin
- Continual refinement of ongoing strategies to reflect new actions & commitments

Process: Local Planning (Cont)

- Expand participation to ultimately include all types of land users
 - E.g. suburban homeowners – urban nutrient management
- Accent on developing very local buy-in
- Prominence of local governments
 - Land Use
 - Comprehensive Planning
- Public comment period

Where Do We Look for Reductions?

- Agricultural practices
- Waste-water treatment
- Educating the public
- **Urban/suburban storm water**
- **Land use changes**
- **Retrofit with low impact development**



How Do We Look for Reductions?

- Reductions locally with existing resources
- Reductions locally requiring new resources
- Reductions from statewide initiatives

How Do We Look for Reductions?

- Loads by source categories
- Examine allocations by major sub-basin
- Loads by County
- Use “scenario builder” to explore options

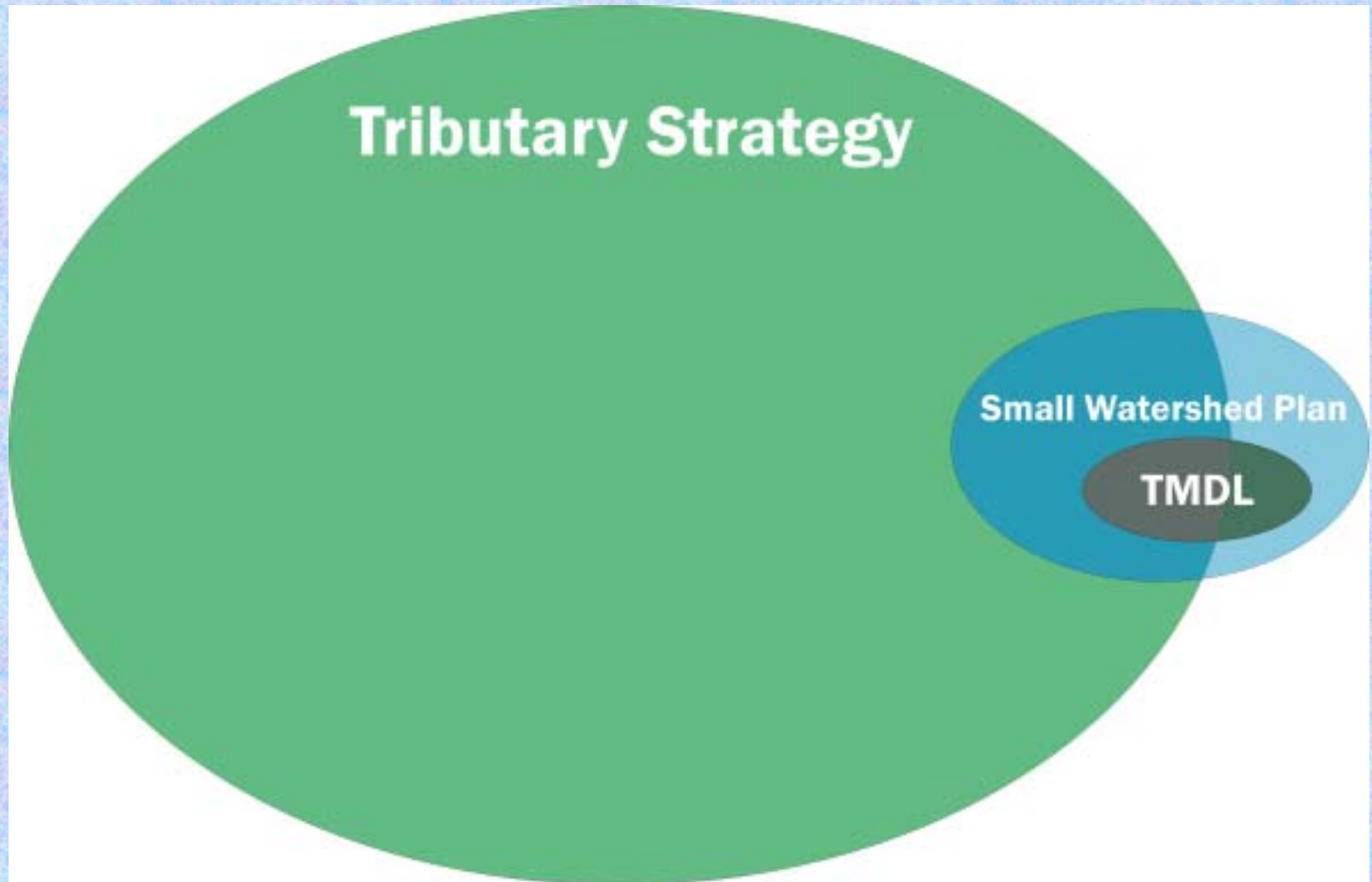
What's Included in the Revised Strategies?

- A “snapshot” of the basin
- A menu of reduction actions (Input Deck)
- Discussion of funding needs and options
- Tracking method for loads, reductions and cap
- Phased strategy implementation

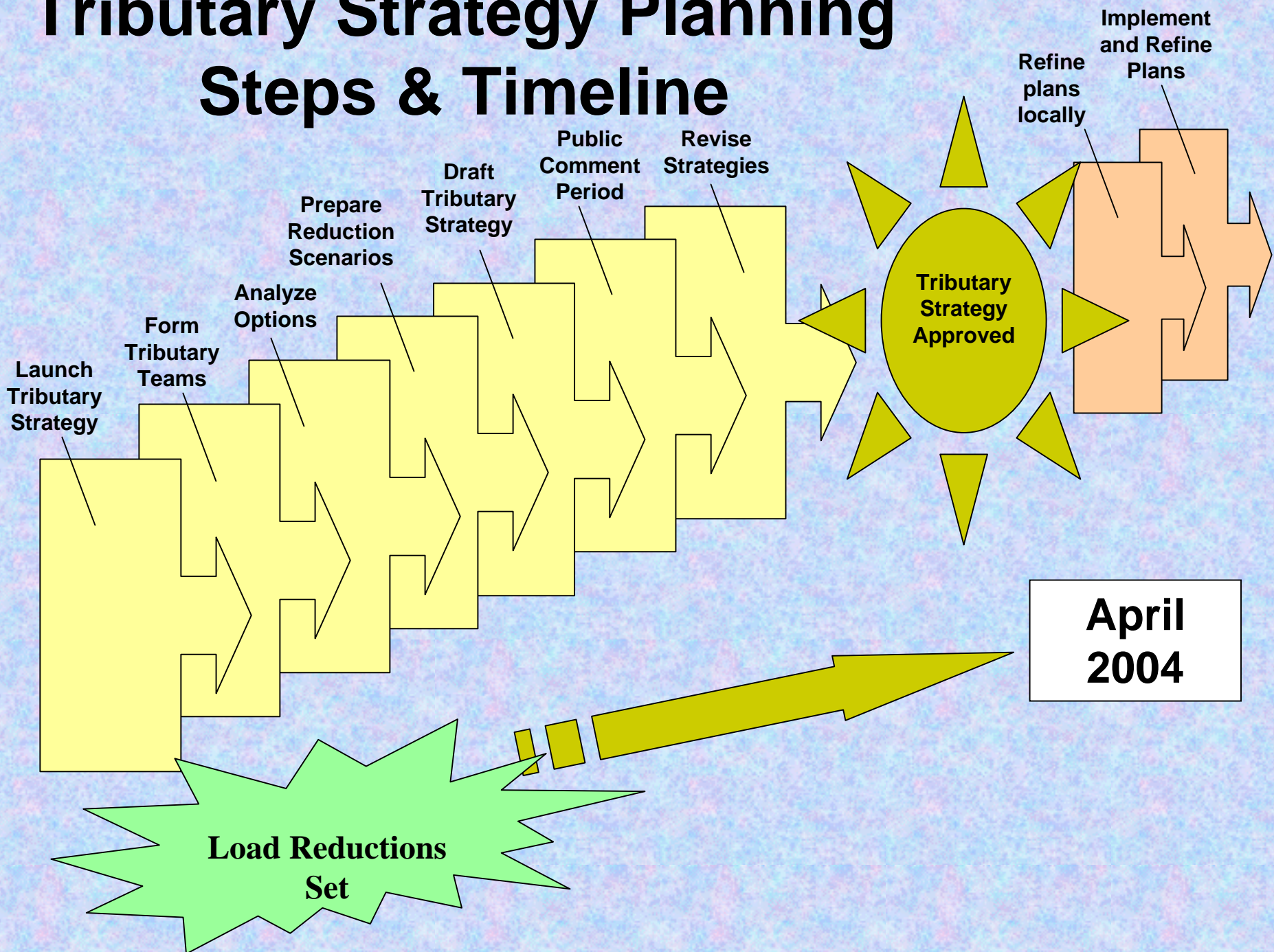
What's Included?

- Status/Progress of N,P,S reductions
 - What success have we had
- Specific Implementation Strategies
 - BMPs – what/where
 - Local government initiatives – e.g. LID
 - Point Source upgrades
 - Watershed Planning

Nested Watershed Planning



Tributary Strategy Planning Steps & Timeline



Proposed Timeline

- Establishment of tributary team: July 2003
- Tributary team reviews allocations and develops scenarios: July-November 2003
- Draft Tributary Strategy: Nov/Dec 2003
- Public meetings: January/February 2004
- Revise Tributary Strategy: March/April 2004
- Deliver completed Tributary Strategy: April 2004

2004 - 2010

- Continual refinement of Tributary Strategy
- Living document
 - Implement existing programs, projects
 - Refine practices, costs, funding,
 - Identify and implement new/unique/innovative programs and practices
 - Marketing strategy to engage new array of stakeholders

What is the next step?

- Establish a diverse, active tributary team
 - Team members that represent all sectors and regions of the basin
 - Hold Tributary Team meeting – July 29
 - Need Commitment by Members



Questions ???

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